DOCUMENT RESUME

ED 061 970 LI 003 640

TITLE	Background for the Cost Analysis of the Order & Standard Loan Library Operations.
INSTITUTION	California Univ., Santa Barbara. Library Systems Development Program.
REPORT NO	LSD-70-60
PUB DATE	18 Dec 70
NOTE	28p.; (0 References)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Cost Effectiveness; *Library Acquisition; *Library Circulation; Library Networks; Personnel; *University Libraries; Working Hours
IDENTIFIERS	*University of California Santa Barbara

ABSTRACT

This document presents the procedures to be followed by all perscnnel participating in the cost study of the order and standard loan functions of the University of California libraries which began on January 11, 1971. The tasks and quantities to be measured are defined. (Other documents on this program are: LI 003641 and 003642.) (Author)

ED 061970

LI 003 640

THE UNIVERSITY OF CALIFORNIA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO • SANTA BARBARA • SANTA CRUZ

LIBRARY SYSTEMS DEVELOPMENT PROGRAM

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

BACKGROUND FOR THE COST ANALYSIS OF THE ORDER & STANDARD LOAN LIBRARY OPERATIONS

18 December 1970
LSD 70-60

CONTENTS

OBJECTIVES OF THE STUDY 1
DATA COLLECTION PROCEDURES 3
TIME SHEET EXPLANATION 6
MEASURED QUANTITY DEFINITIONS... 9
TASK DEFINITIONS 12
TASK AND QUANTITY SUMMAR..... 13
TOTAL SYSTEM SUMMARY .....Cover

ABSTRACT

This document presents the procedures to be followed by all personnel participating in the Cost Study of the Order and Standard Loan functions of the UC Libraries to begin on 11 January 1971. The tasks and quantities to be measured are defined.

WHAT DOES IT COST NOW?

SANTA BARBARA, CALIFORNIA 93106

I. OBJECTIVES OF THE STUDY

This Cost Study is part of an effort originally requested by the University of California President's Office in preparation for establishing the feasability of a major University-Wide Library Systems Development Program (see document LSD 70-18). It has been unanimously endorsed by the UC Library Council on the recommendation of the Program Review Committee (a body established by the Library Council to monitor the Program and to establish policies and priorities).

The development of new Library Systems which will make a much greater use of computers is a very costly process - the total investment over the next decade may run as high as twenty million dollars. Before asking for such funding commitments from the State of California, the University would like to assure itself that such a program is financially sound - that in fact, an investment now eventually will be paid back through the libraries' abilities to abosrb greater work loads with relatively smaller increases in operating budgets. In order to establish the ability of mechanization to significantly increase productivity, the University Libraries must first measure the productivity of existing manual systems.

Preliminary studies to date have suggested that half of the operating economies which may be possible through the increased use of computers can be realized in the Order and Standard Loan Subsystems alone. The University Libraries have given these two Subsystems the highest priority for implementation. For these reasons and because we would like to minimize the disruption of library operations which a University-Wide Cost Study is bound to cause, we are limiting the study to these two areas.

The data obtained from this study will be used in the final Feasability Phase Report to be submitted to the UC President's Office on 1 April 1971. The analysis of the data will be used to predict the magnitude of the increase in productivity of our library operations which can be expected to follow the introduction of mechanized procedures. In addition, some libraries may find that they can make immediate use of the data in their efforts to better understand and streamline their operations.

Naturally, for the study to be meaningful, every participant must make an honest effort to keep track of how he actually spends his time. No one must speed up to "look good" (an abnormally high production rate might suggest that a department could absorb an increased work load without the needed additional staff!). And, no one should slow down in order to emphasize their currently understaffed conditions (exorbitant unit production costs might imply an inefficient operation). The same comments must be made about measured quantities as well. We do not want to distort or exaggerate any of the data intentionally. On the other hand, we do not want anyone to fabricate results just to make sure that the data "looks reasonable". In this regard, the individual actually doing the work should, in some way, be involved in recording the amount of time he spends on various tasks. Although we have not rigidly prescribed the precise nature of this involvement, and we recognize that it will vary from one situation to another, it is expected that every individual throughout the University Library System who performs work in connection with the Order or Standard Loan functions will have an opportunity to verify that the data recorded for him is reasonable.

We recognize that some jobs are so complex that it would be difficult to measure the actual time spent on a number of tasks being performed simultaneously and that some less accurate form of estimating will be required. Measuring one group and assuming a similar group, say branch libraries, spend their time in an identical way is not acceptable. We want actual measurements made for every part of the UC Library Systems where Order or Standard Loan activities occur. Every library is unique and we have no way of knowing in advance which ones would represent exceptions to a typical pattern, even if that could be established.

While we would ideally like to have actual measurements, we recognize that there will be a good many situations where people will need to provide estimates of the amount of time spent on several tasks. We do not expect anyone to spend an inordinate amount of time on this study (it is not a time and motion study). We would expect that an effort would be made to be reasonably accurate. Supervisors are expected to insure that the time and quantity data reported for their group are accurate to within 25% of the true values. This tolerance is an upper bound for difficult to measure tasks. We expect a much better estimate on tasks less difficult to measure.

II. DATA COLLECTION PROCEDURES

On January 11, 1971 all personnel involved in Order and Standard Loan activities throughout the UC Library System will start recording the amount of time they spend on each of the Standard Tasks and will measure the quantity of work connected with those tasks. An estimated 3000 Library employees working in many different departments such as Acquisitions, Circulation, Serials, Reference, etc. or Branch Libraries will participate. The process of measuring costs is scheduled to be completed by Sunday, 21 February 1971.

Every participant in this study will be assigned an Employee Number by the Systems Staff in the Library to show in which department each person works. The Library Systems Staff will provide pay classifications and the number of hours each person is scheduled to work each week. This data will be provided only once unless there is some change in status so that most people will be concerned only with keeping track of how they spend their time and how many of the measured quantities they handle.

In addition to the tasks which are directly concerned with the Order and Standard Loan activities certain related supportive activities and time spent in any of the overhead categories listed on page 12 & 13 are to be recorded.

Since the functions covered by the two Subsystems for which cost data is being sought are narrowly defined, many of the people participating in this study will be spending significant amounts of their time on activities covered by other Subsystems. Time spent on activities which are outside the scope of this current study is to be recorded under the Task numbered 0000 so that each persons time adds up to their budgeted time for the week. If you spend more than one hour on an excluded activity, include a few words of explanation on the back of your time sheet.

The list of all Subsystems defined for the UC Libraries presented on the back cover of this document should help you determine whether a particular category of work is to be included in the study or not. As a general rule, if you spend more than one hour per week on a task which you are not sure should be counted as part of Order or Standard Loan, check with your Supervisor who may in turn want to check with the Systems Staff at your Library. The functions of the Subsystems and Modules are more completely defined in the Systems Definition Document (LSD 70-21) which is available from your Library Systems Staff.

The list of tasks and measured quantities presented here is the product of an effort spanning more than a year and involving Library Systems personnel and working level Librarians at every Campus. There were at least three previous versions. Still, we know that it is not perfect. Not all of the Tasks are of equal importance nor have we included all of the quantities which have a relationship to the cost of the operations. We may have overlooked a very costly task

and we may need to "force" some work to fit the Standard Tasks which are provided. It will be very difficult (but not impossible) to add a new Standard Task now that the study has commenced. If some very unique and costly activity is identified, we can make the necessary adjustments.

The time and measured quantities must be reported in a standard way. The explanations for the Time Sheet on page 6 are presented to make the requirements more understandable. No deviation whatsoever from this scheme is permitted. We are using a computerized analysis procedure (SPSS) to process the data received from approximately three thousand library employees throughout the University each week. Naturally, with that many time sheets and the very short deadline with which we are working, there will be very little time to give individual attention to very many of the time sheets.

On the other hand, the precise technique that a particular department choses to have its people use in keeping track of the time they spend on various tasks is not prescribed, with the single exception that the person actually doing the work must, in some way, be involved with the process of assuring that the time recorded for him is reasonable. Some departments may wish to make tailor-made Tally Sheets listing just those tasks with which their department is concerned, with some means for showing the time of day work is done on each task. Others may wish to ask their personnel to keep track of their time on a P-slip or Desk Calendar using their personally annotated copy of this booklet as a check list. (The wide margins in this booklet have been provided so that you can annotate your own personal copy to make a checklist of tasks and quantities which are ordinarily a part of your job.) Some departments may ask their personnel to make a note of their activities each hour, while others, where the work involves fewer tasks, may judge that a daily estimate will provide reasonably accurate results. In any case your Supervisor should concur with the specific methods you use for recording data. He is responsible for assuring that the error between what you record and the true values never exceed 25% at any time during the study.

If there are situations where the work is far from typical during a particular week, we would like the situation drawn to our attention so that it can be reflected in the analysis. For example we know that one library will be in the process of moving its collection during the entire period of the Cost Study so that the data which is reported will be far from typical. (Time spent here should be recorded under Task 0000.) If you are not sure that your Supervisor is submitting an explanation that covers your non-typical work, play it safe and jot down a few words on the back of your time sheet.

LIBRARY SYSTEMS DEVELOPMENT PROGRAM

WEEKLY TIMEKEEPING PROCEDURE FOR THE ORDER AND STANDARD LOAN COST STUDY

WHO?		WHAT?
Supervisor	1	Give each employee a new time sheet Monday morning.
You	2	Write down time spent on each Standard Task you do and record Measured Quantities you handle each day of the study using the form your supervisor provides. Make any activity that takes less than 1 hour a week fit one of the Standard Tasks. If it takes more than 1 hour and doesn't seem to "fit, ask your supervisor.
Supervisor	3	Check any activity that doesn't fit against the Standard Task definitions in LSD 70-80 and the System Definitions in LSD 70-21A. If it still doesn't fit, call systems staff at your library.
Systems Analyst	4	Make exceptions fit definitions if possible. Otherwise, call Dave Gaughen, Ext. 3011, Santa Barbara.
You	5	Write short explanation on back of time sheet of any work charged against Task 0000 or any work situations which you feel are not typical.
	6	Add up daily times and quantities (if required) for each task before you leave work on last day of week.
	7	Give your time sheet to your supervisor.
Supervisor	8	Check all time sheets for accuracy and to be sure all budgeted hours are accounted for.
	9	Check all time sheets to be sure all measured quantities are recorded and that more than one person has not recorded the same measurements.
	10	Check to be sure there is a time sheet for every participating employee and prepare timesheets for absentees, estimating, if necessary.
	11	Check all comments on back of sheet for reasonableness.
	12	Check all time estimates to be sure they are reasonable (in no case should estimates be in error by more than 25%) and note any estimates that appear systematically biased in any direction on back of time sheet.
	13	Write on back of your own timesheet short explanations of any situation for your group not typical during the week or any difficulties encountered.
	14	Turn in all timesheets for your group by 12 PM Monday following the end of the week to the individual designated by your Systems Staff.
Systems Analyst	15	Pick up all time sheets for your campus by 2 PM Mon.
	16	Check that all time charged to Task 0000 really should be excluded.
	17	Check to be sure theres a sheet for every participant
	18	Write short summary of exceptions for the week.
	19	Send timesheets and summary statement by noon Tuesday to the UCLSD Program Office in Santa Barbara by the fastest means available.

6

SANTA BARBARA, CALIFORNIA 93106

III. TIME SHEET EXPLANATION

The following three pages illustrate the use of the time sheet to be filled out weekly by each employee participating in this cost study. The timesheet has been designated to be both easy to understand and to use. A copy of the timesheet is included on page 8 and a few typical entries have been made on the timesheet to aid in the explanation. The timesheet contains columns and rows. The rows running across the page provide spaces for recording data for many tasks each day and for entering the weekly totals. The columns running down the page are provided for recording data on each task undertaken by an employee during each day of the week. Any "cell" on the timesheet may contain either a time measurement or a time and quantity measurement, if there is a quantity associated with that particular task. One "cell" is used for each day that a particular task is performed. Time is to be recorded above the diagonal line in a "cell" and quantities are to be recorded below it. It is imperative that numbers of quantities be recorded for those tasks requiring it! The "quantity related tasks" are easily ascertained from the task list presented on pages 13 and 14. If no wuantities are measured for such tasks, zeros should be entered to indicate that the quantity measurement was considered, but that the number measured was zero.

Data fields for the timesheet are explained as follows with circled numbers indicating the fields being described:

① Enter the day and month - the week always begins on Monday.

② If you have more than 14 tasks during any one week, you will need to use more than one timesheet. Enter the number of this sheet in the first space and the total number of timesheets in the second.

③ This is an optional column heading which you may use to describe the task being recorded. Four examples are shown. The first task (1122) is a "quantity related" task and units of work are recorded along with the time spent on each task for each day. In this example, a total of 350 minutes was expended and a total of 585 units (in this case, discharged books) of the measured quantity was recorded. The second example shows a task for which there are no quantities to be measured. A total of 660 minutes were spent on this task during the week. The third column shows an example of a non-production oriented activity. None of the tasks in this category have any measured quantities. In the example, 135 minutes were spent on breaks of all kinds during the week. The last entry in the example is included as a reminder to the participants that we would like to know the amount of time which has been required on the part of line personnel to participate in this cost study.

For people who ordinarily have time keeping responsibilities, the time recorded here will include both time to handle regular time keeping duties as well as to participate in this study. For most people, however, the time recorded here will represent time spent on recording data for the cost study.

④ Enter the task number for which you are recording data. All task numbers contain four digits. Accuracy here is very important.

⑤ Enter the time in minutes spent on the task covered by this column on the day covered by this row.

⑥ If there are measured quantities associated with the task in this particular column, record the measured number of units of the quantity. Quantity definitions are presented on page 9-11. This data field must be filled in for tasks where measured quantities are specified.

⑦ Add up the minutes spent during the week on tasks covered by this column and enter the total here. It is the sum of the minutes recorded above the diagonal lines in this column. A full time employee should account for 2400 minutes per week.

⑧ If there were quantities to be measured for this task, enter the total for the week in this space. The number of units recorded below the diagonal lines in this column are to be added to provide the weekly total.

⑨ Enter each week the employee number assigned by your supervisor (or the campus systems staff). You will use the same number throughout the study unless you transfer to a different organizational unit within the library during the study. Enter your last name first, followed by your first initial (only).

TIME SHEET

LIBRARY SYSTEMS DEVELOPMENT PROGRAM

EMPLOYEE NUMBER ⑨ | EMPLOYEE NAME | PAGE ____ OF ____ ② | WEEK BEGINNING ①

| TASK NO. / DAY / TOTALS | | |

IV MEASURED QUANTITIES DEFINITIONS

An effort was made to identify a measurable quantity associated with every task in the existing order and circulation functions which would characterize the workload associated with that task. Next, tasks in the same module which had the same measured quantitites were grouped together. Finally, a qualitative assessment of the relative magnitudes of the time spent on each of the groups of tasks was made and only those measured quantities which predominately determined the personnel costs of performing the work in the module were retained. If a module has more than one measured quantity, these are aggregated in some fashion to provide a single measured quantity for each module. After personnel cost data and measured quantities have been collected, the costs per unit of these measured quantities will be calculated and compared with similar costs for new systems where the computer performs most of the drudgery.

To summarize, the measured quantities defined below are intended to be reasonably accurate predictors of the costs of performing the functions of the module. In other words, an increase in the number of measured quantities handled by the module would cause a reasonably predictable increase in the personnel costs involved in handling the increased quantities.

Generally speaking, all categories of library materials handled by all organizational units in the library are to be considered. The following are explanatory notes for each of the measured quantities where further definition seemed required:

6103 DUPLICATE TITLES DISPOSED. This is the measure of the number of bibliographic units which were unintentionally duplicated by the library and disposed of in some way during the period of measurement. All methods of disposal are included such as storing for book sales, destroying, adding to the collection, returning to the dealer etc.

6203 REGULAR ORDERS SENT OUT. This quantity is concerned with the library's main ordering procedure and may include all categories of materials such as monographs, serials, pamphlets, government publications, etc. as long as they are treated in the same way as the bulk of the library's orders for specific titles. This

quantity does not include the title count in bulk purchases or approval plans.

6204 LETTER ORDERS SENT OUT. This includes orders for materials which are ordinarily provided to the libraries free of charge and are usually handled outside of the library's regular order procedures. Types of material include: telephone directories, college catalogs, annual reports, etc.

6205 URGENT ORDERS ISSUED. All orders for all categories of materials submitted by phone or TWX are included. It is expected that most such orders deal with urgently required material. If your library uses such methods for routine orders, please note this on the data sheets and draw to the attention of the person collecting data at your campus.

6206 PRE-ORDER LETTERS SENT OUT. This is the number of letters sent to vendors prior to the actual placing of an order with the vendor. Such things as requests that the dealer search for a title, indications that the library intends to order a title and wishes the dealer to hold material, etc. are included. The quantity to be counted is the number of titles on such letters.

6302 TITLES CLAIMED. Every claiming action is to be counted including second and third claims, etc. Only claims against a specific order are to be included.

6303 ISSUES CLAIMED. This primarily covers the claiming of individual serials issues provided on a subscription or standing order. Each claiming action is to be counted including second and third claims, etc.

6306 INVOICES CLAIMED. These are claims for missing invoices for which material has already been received.

6401 ITEMS RECEIVED. Each physical unit regardless of the category of material is to be counted. Thus, an issue of a serial, a reel of microfilm, a volume of a set, would be counted as individual items. To be counted the items must be unpacked and arranged for further processing. Thus, the receipt of a bulk purchase would not be counted as long as the boxes sat unopened in a storeroom.

6503 INVOICES PROCESSED. A processed invoice is one for which payment has been authorized. It does not include the processing of statements or other duning

notices which are received in addition to invoices.

6601 RECORDS QUERIED, ADDED OR MODIFIED. Count each time a record is purposefully handled in any way in connection with the order processing operations.

6703 TITLES ON WANT LISTS. Count each time an out-of-print title is sent to a dealer on a want list or in a package of want item slips.

1111 CHARGING TRANSACTIONS. Count every time the library records that a patron has been made responsible for the return of an item. Thus, charging recordings for in-library use or books to study carrels or books to special locations such as bindery or Reserve Book Room are included. Exclude interlibrary loan transactions.

1113 RENEWAL TRANSACTIONS. Count every time a charge record is annotated or a new charge record made to indicate that a patron has been authorized to retain library material for an additional period.

1122 DISCHARGING TRANSACTIONS. Count each time a charge record is processed to indicate that the material has been properly returned. Exclude interlibrary loan transactions.

1132 REQUEST TRANSACTIONS. Count each time a request is made by anyone to hold, recall, or search for missing library material.

1141 TITLES LISTED. Count the number of titles on the long-term loan lists which the library prepares for its patrons.

1155 TITLES LOANED. Count both titles loaned to library patrons as well as borrowing libraries. In other words, count each time a bibliographic unit is processed either way on an interlibrary loan.

1161 CARDS ISSUED. Count each time the library deals with an individual user in order to establish his borrowing privileges.

1172 NOTICES SENT OUT. Count each time a patron is notified in writing that he has an overdue book. Thus, second and third overdue notices are counted etc.

1174 COMPLETED CALLS. Count each time a patron is notified by telephone that he has an overdue book.. Multiple calls, if completed, are counted.

V. TASK DEFINITIONS

An attempt is being made to identify all of the major library functions performed throughout the University of California. The results of this effort to date are reported in the Library Systems Definition Document (LSD 70-21A). While the document has received a wide review by librarians and systems personnel throughout U.C. and has already gone through several versions, we recognize that some specific tasks performed by a library still may not be clearly specified.

The standard list of tasks for the Order and Standard Loan Subsystems presented here attempts to more completely define the functions of the modules in these two subsystems. However, the names we have given to the standard tasks may imply different things to people, so we are attempting in this section to more clearly define the activities which are intended to be covered by the standard tasks. It may be necessary to refer to the definition of other modules outside of the Order and Standard Loan Subsystems in order to be sure that an apparently overlooked activity has not been included in one of the other subsystems.

THE ORDER SUBSYSTEM

6.1 SURPLUS CONTROL MODULE

6100 SOLVE PROBLEMS. This task includes unforseen contingencies directly related to the functions of this module which would not ordinarily be handled by routine exception procedures associated with any of the other tasks in this module.

6101 PREPARES CORRESPONDENCE. This covers writing letters to vendors regarding the conditions for returning unwanted material which has been unintentionally duplicated.

6102 ACTS ON CORRESPONDENCE. This includes considering the responses to correspondence with the vendors and a determination of appropriate actions to be undertaken.

6103 PROCESS DUPLICATES. This includes the physical handling of material to be returned to vendor for either refund or credit, the storage of the material for a book sale, the preparation and shipment to a book exchange or cooperating library, or other similar disposition. This task includes the activity connected with shelving the duplications until final dispos-

NO	TASKS BY MODULE	MEASURED QUANTITIES
	ORDER SUBSYSTEM	
	6.1 SURPLUS CONTROL MODULE	Titles unintentionally duplicated
6100	Solve problems	None
6101	Prepare correspondance	None
6102	Act on correspondance	None
6103	Process duplicates	Duplicate titles disposed
	6.2 ORDER INITIATION MODULE	Titles explicitly ordered
6200	Solve problems	None
6201	Check requests for missing data	None
6202	Provide missing data on requests	None
6203	Prepare order forms and mail	Regular orders sent out
6204	Prepare order letters and mail	Letters sent out
6205	Telephone or TWX orders	Urgent orders issued
6206	Prepare pre-order correspondance	Pre-order letters sent
6207	Process library records of orders	None
6208	Process order cancellations	None
6209	Process ceased publications	None
6210	Process dealer reports	None
	6.3 CLAIMS PROCESSING MODULE	Items claimed
6300	Solve problems	None
6301	Search files for needed action	None
6302	Prepare non-serials claims	Titles claimed
6303	Prepare serials claims	Issues claimed
6304	Telephone or TWX urgent claims	Items claimed
6305	Handle and process material	None
6306	Claim missing invoices	Invoices claimed
6307	Process responses to claims	None
	6.4 RECEIVING MODULE	Items received
6400	Solve problems	None
6401	Unpack and arrange materials	Items received
6402	Check material and record receipt	None
6403	Prepare material for next process	None
6404	Relocate order records	None
6405	Make new receiving records	None
	6.5 INVOICE PROCESSING MODULE	Processed invoices
6500	Solve problems	None
6501	Prepare invoice for processing	None
6502	Reconcile invoice with shipment	None
6503	Process invoice for payment	Invoices processed
6504	Prepare invoice for accounting	None
6505	File copy of invoice	None
6506	Obtain and use credit memos	None
6507	Check UC accounting ledger	None
6508	Order government coupons	None
6509	Process other payment forms	None
	6.6 VENDOR FILE MAINTENANCE MODULE	Records queried, added or modified
6600	Solve problems	None
6601	Maintain and use file	Records queried, added or modified
	6.7 WANT LIST PROCESSING MODULE	Titles on issued want lists
6700	Solve problems	None
6701	Sort and file OP requests	None

NO	TASKS BY MODULE
6702	Decide when and where to ma
6703	Send out OP want lists
6704	File copies of OP want list
6705	Follow up and reissue lists
6706	Process dealers reports
6707	Search catalogs for wants
	STANDARD L(
	11.1 BOOK CHARGING MODULE
1110	Solve problems
1111	Charge book to patron
1112	Process charge documents
1113	Renews book charges
1114	Waiting at circulation desk
1115	Collates special material
	11.2 BOOK DISCHARGING MODUL
1120	Solve problems
1121	Unload book drops
1122	Discharge books
1123	Process discharge records
1124	Process books for repair
1125	Check books for holds
1126	Prepare books for shelving
1127	Collate special material
	11.3 HOLDS & RECALL PROCESS
1130	Solve problems
1131	Check charge records for l(
1132	Take request for holds and
1133	Issue recall notices
1134	Search for missing books
1135	Maintain hold shelf
1136	Tell patron book available
	11.4 LONG TERM LOAN LIST P MODULE
1140	Solve problems
1141	Prepare lists from charge
	11.5 INTERLIBRARY LOAN CON
1150	Solve problems
1151	Prepare requests for proce
1152	Check holdings
1153	Process request
1154	File request
1155	Charge book to borrower
1156	Process book for mailing
1157	Obtain photocopy of origin
1158	Clear records on return
	11.6 PATRON REGISTRY MAINT MODULE
1160	Solve problems
1161	Process library card reque
1162	Prepare money for deposit
1163	Maintain patron address li
	11.7 OVERDUE BOOK PROCESSI
1170	Solve problems
1171	Process overdue charge rec
1172	Issue overdue notices
1173	File record of overdue not

	MEASURED QUANTITIES
	None Titles on want lists None None None None
BSYSTEM	
	Items charged or renew
	None Charging transactions None Renewal transactions None None
	Items discharged
	None None Items discharged None None None None None
IODULE	Hold, recall or search requests
on ls	None None Request transactions None None None None
ION	Titles listed
ls	None Titles listed
IODULE	Titles loaned
	None None None None None Titles loaned None None None
	Newly qualified patrons
	None Cards issued None None
ULE	Overdue notices sent
	None None Notices sent out None

NO	TASKS BY MODULE	MEASURED QUANTITIES
1174	Telephone about overdue items	Completed calls
1175	Prepare bills and send out	None
1176	Initiate lost book reordering	None
1177	Process lost books which are found	None
	SUPPORTING TASKS	
1800	Budget development	None
1910	Timekeeping	None
1920	Personnel processing	None
1930	Desk scheduling	None
1940	Staffing needs projections	None
1950	Recruitment	None
1960	Personnel training	None
2000	Equipment & Supplies handling	None
2130	Work flow analysis	None
2200	Forms, documents and mail handling	None
2400	Other administrative functions	None
	NON-PRODUCTION ORIENTED ACTIVITIES	
9901	Vacation	None
9902	Leave without pay	None
9903	Sick leave	None
9904	Holiday	None
9905	Excused time	None
9906	Rest breaks	None
9907	Travel	None
9908	Entertaining (guests, etc.)	None
9909	Non-job oriented time	None
9910	Education	None
	NON-ORDER OR STANDARD LOAN TASKS	
0000	Other library operations	None

NOTES

ition of material has been determined. It does not include the process of evaluating the desirability of adding the unintentional material to the collection as such decisions are a part of the Library Materials Selection Module (1.3).

6 2 ORDER INITIATION MODULE

6200 SOLVE PROBLEMS. See Task 6100 explanation.

6201 CHECK REQUESTS FOR MISSING DATA. Review all requests for completeness and accuracy of data required for ordering. This task does not include checking public catalogs or other records of holdings, checking outstanding order files, bibliographic searching or evaluations for decisions to purchase. All of these activities are handled by a completely different subsystem and thus, are excluded from the present study.

6202 PROVIDE MISSING DATA ON RFQUESTS. Includes the assignment of an in-print vendor, the assignment of funds or funding guidelines, and the assignment of an estimated price, if necessary.

6203 PREPARE ORDER FORMS AND MAIL. Includes typing of multiple part order forms, assigning order numbers, the revising of typing, stuffing envelopes with orders, and mailing the orders. This task includes the processing of regular orders for all types of materials including monographs, serials, pamphlets, government publications, non-book materials, etc. as long as they go through the normal ordering procedure.

6204 PREPARE ORDER LETTERS AND MAIL. Includes typing of order or request letters, assigning order numbers, their revision, and the filing of office copies. This task includes the procedures used to acquire materials such as telephone directories, college catalogs, annual reports, and other similar material which is ordinarily provided free in the library.

6205 TELEPHONE OR TWX ORDERS. This task takes care of placing the order by phone or TWX as well as the recording of such requests for future follow-up. It applies to the ordering of all categories of material including non-book items and usually involves requests for urgently needed materials.

6206 PREPARE PRE-ORDER CORRESPONDANCE. This includes filling out "quote" letters, the preparation of requests to "search", and letters notifying dealers of the library's intention to order with a request that the material be held. Receiving responses to such correspondance and initiating the necessary follow-up action is included, also.

6207 PROCESS LIBRARY RECORDS OF ORDERS. This task includes bursting multiple part order forms, routing them as required, and filing the slips in the various internal processing files. It does not include any special processing of order forms copies connected with book fund accounting or with processing slips for approval books. It includes copying the order form information by any means (such as Xerox).

6208 PROCESS ORDER CANCELLATIONS. This includes correspondance concerned with cancellations and the transmittal of information regarding the cancellations to anyone concerned with the order.

6209 PROCESS CEASED PUBLICATIONS. This includes the transmittal of information regarding ceased publications to anyone concerned with the subscription or standing order.

6210 PROCESS DEALER REPORTS. This includes evaluating and acting on reports from book dealers that the title is "not yet published", out-of-print, that a search for the material will be initiated, etc. This task also includes the necessary follow-up actions including the notification of anyone concerned with the order.

6.3 CLAIMS PROCESSING

6300 SOLVE PROBLEMS. See Task 6100 for explanation.

6301 SEARCH FILES FOR NEEDED ACTION. This task includes all the searching of any files from which the need to claim missing materials can be determined. All types of material are covered by this task, including monographs, continuations, and serials.

6302 PREPARE NON-SERIALS CLAIMS. This task includes all the procedures used in preparing and sending out claims for non-serial material. It includes the necessary preparation of follow-up files and the process of reviewing these files for follow-up, the preparation of letters as well as the filling out of claim forms, claiming materials on old orders as

well as claiming materials for which invoices have already been received.

6303 PREPARE SERIALS CLAIMS. This task concerns the claiming of missing issues of serials. Otherwise, it is similar to 6302.

6304 TELEPHONE OR TWX URGENT CLAIMS. This task includes the claiming of all categories of materials by phone or TWX and ordinarily involves material for which there is an urgent need.

6305 HANDLE AND PROCESS MATERIAL. This task involves the physical processing of the material itself including defective material. It includes the preparation of such material for mailing and includes the receipt and routing of material received on claims.

6306 CLAIM MISSING INVOICES. This task includes the filing of necessary forms and other internal records until the claiming action has been completed.

6307 PROCESS RESPONSES TO CLAIMS. This task is concerned with handling the responses to claims and making the necessary record changes to reflect these responses.

6.4 RECEIVING MODULE

6400 SOLVE PROBLEMS. See Task 6100 explanation.

6401 UNPACK AND ARRANGE MATERIALS. This task includes the physical receiving of materials in the mails or from any source and the sorting and arranging of the material on various shelves for further processing. It includes the processing of all forms of material including approval material, bulk purchases, serials issues, etc.

6402 CHECK MATERIAL AND RECORD RECEIPT. This task includes the receiving of all categories of materials such as serials, series, periodicals, monographs, government publications and non-book material. All processes involved in altering, clearing, or adding to receiving files are included. Checking to make sure that the material received is that which was ordered is included.

6403 PREPARE MATERIAL FOR NEXT PROCESS. This task includes the preparation of special routing slips, the marking of the material with shelving number, property stamping material, and

organizing the material for transmittal to the next processing station.

6404 RELOCATE ORDER RECORDS. This task covers the process of relocating a copy of the multiple part order form to the public catalog to indicate receipt or the annotation of records in such catalogs to indicate receipt. This includes the bursting of multiple part order forms and refiling of the various slips in designated files throughout the library. It includes the processing of patron notification that material has arrived. It includes the preparation of new public records indicating availability of material and the preparation of lists indicating recently acquired or received titles. Also included are the handling of approval forms and any necessary copying of these forms.

6405 MAKE NEW RECEIVING RECORDS. This is concerned primarily with the preparation of new receiving records needed to continue recording receipt of old serials titles (eg. Kardex cards).

6.5 INVOICE PROCESSING MODULE

6500 SOLVE PROBLEMS. See Task 6100 explanation.

6501 PREPARE INVOICE FOR PROCESSING. This task includes the handling of invoices from vendors, recording of the amounts billed and the filing of invoices for further processing.

6502 RECONCILE INVOICE WITH SHIPMENT. This task involves the verification of the acceptability of the received library material, and the determination that the invoice should be paid.

6503 PROCESS INVOICE FOR PAYMENT. Included are foreign currency conversion, checking arithmetic, calculating tax, initialing the invoice to indicate acceptability, etc.

6504 PREPARE INVOICE FOR ACCOUNTING. Prepare list of invoices or "sticker" as required by university accounting. Batches invoices and transmits to accounting for payment.

6505 FILE COPY OF INVOICE

6506 OBTAIN AND USE CREDIT MEMOS. This includes writing for credit memos on returned items as well as filing and retrieving credit memos to send with invoices when the invoices amount exceeds the value of the credit slip.

6507 CHECK UC ACCOUNTING LEDGER. This is the process of reconciling the internal library book fund accounting procedure with the University accounting ledger. The process of handling and filing the UC accounting data processing ledger sheets is also included.

6508 ORDER GOVERNMENT COUPONS. This includes the maintaining of a record of coupon use and the determination of when reordering is required.

6509 PROCESS OTHER PAYMENT FORMS. This includes the processing of "Requests for Issuance of Check" forms for pre-payment.

6.6 VENDOR FILE MAINTENANCE MODULE

6600 SOLVE PROBLEMS. See Task 6100 for explanation.

6601 MAINTAIN AND USE FILE. Includes the maintenance of records of information about each of the vendors used by the library. The preparation of cards for new vendors and the updating of information for old vendors is covered. Pulling and refiling cards for reference including the use of such cards in the preparation of lists of vendors which meet some special set of conditions (such as publishers lists for approval plans) are covered.

6.7 WANT LIST PROCESSING MODULE

6700 SOLVE PROBLEMS. See Task 6100 explanation.

6701 SORT AND FILE OP REQUESTS. This involves the sorting, and filing of OP requests for all categories of materials including monographs, periodical back files, non-book materials, etc.

6702 DECIDE WHEN AND WHERE TO MAIL. This task involves the determination of when a want list should be submitted after the titles on the list have been approved for purchase. The task also includes the determination of the vendor which should be used.

6703 SEND OUT OP WANT LISTS. This task includes the preparation of letters or other forms used to notify OP dealers about the titles the library would like to acquire.

6704 FILE COPIES OF OP WANT LISTS.

6705 FOLLOW UP AND RE-ISSUE LISTS. This task includes the review of files of outstanding want lists and the determination of when a list should be re-issued to another dealer.

6706 PROCESS DEALERS REPORTS. This includes the processing of responses to want lists other than the material. It includes an evaluation of the response from the dealer and a determination of the next appropriate action to be taken.

6707 SEARCH CATALOGS FOR WANTS. This task involves the searching of OP catalog (or exchange lists etc.) offerings to locate copies of titles which were previously recommended for purchase. It does not include the review of OP catalogs (or other lists of offerings) for opportunity buying.

STANDARD LOAN SUBSYSTEM.

11.1 BOOK CHARGING MODULE

1110 SOLVE PROBLEMS. See Task 6100 explanation.

1111 CHARGE BOOK TO PATRON. Filling out charge cards, checking patron ID cards for status (including undesirable patrons), pulling book cards from books and recording date due, verification that complete information is available for charge transactions, are included. Paging of books is included in an entirely different subsystem (13.3 Stack Maintenance Module) so that time involved in such activities are excluded from the present study.

1112 PROCESS CHARGE DOCUMENTS. This includes the filing of charge cards, keypunching the charge records, edge notching Key-Sort cards, etc.

1113 RENEWS BOOK CHARGES. Receiving renewal requests and processing them to permit the patron to retain the book for an additional charge period by whatever means (telephone,book in hand, list of call numbers, etc.) are included.

1114 WAITING AT CIRCULATION DESK. This is the scheduled time spent by library staff members not actually involved in any other circulation activities. It is the time involved in waiting to serve library patrons. If waiting time is used to perform other library functions, this time should be charged against those other functions.

1115 COLLATES SPECIAL MATERIAL. This involves counting plates, sheets of maps, etc. to insure that a record for such easily-lost items are made a part of the charge record.

11.2 BOOK DISCHARGING MODULE

1120 SOLVE PROBLEMS. See Task 6100 explanation.

1121 UNLOAD BOOKDROPS. This includes the time to go to and from the bookdrops and the time to load and unload book trucks. But, it does not include the time for sorting or shelving books. It does not include collecting or reshelving of books which have been used in the library.

1122 DISCHARGE BOOKS. This includes clearing charge records and voiding open date-due stamps.

1123 PROCESS DISCHARGE RECORDS. This includes the process of selecting or transferring charge records to history files for future analysis.

1124 PROCESS BOOKS FOR REPAIR. This includes checking books over to determine whether or not they need repair and the preparation of the necessary records for those which are routed for repair.

1125 CHECK BOOKS FOR HOLDS. This includes special steps in the discharge process required to identify and segregate those books on which holds have been placed.

1126 PREPARE BOOKS FOR SHELVING. This includes the physical handling of discharged books necessary to get them to the location where presorting forshelving is handled. It does not include the sorting of books into call number in preparation for shelving operation or the shelving (or filing) of materials.

1127 COLLATES SPECIAL MATERIALS. This involves counting plates, sheets of maps, etc. to insure that such easily lost items (as recorded on the charge record) have been returned with the material.

11.3 HOLDS & RECALL PROCESSING MODULE.

1130 SOLVE PROBLEMS. See Task 6100 explanation.

1131 CHECK CHARGE RECORDS FOR LOCATION. This involves the initial check of charge files or holding files to determine the location of material which has not been found on the shelves. It involves discussing with the patron possible actions which he may take including directing him to special shelving locations such as the Reference Room or Reserve Book Room.

1132 TAKE REQUESTS FOR HOLDS & RECALLS. This includes handling requests for searches and requests for books on the New Book Shelf as well as books currently charged out to other patrons. It includes the accepting and preparation of helds and recall requests for patrons. It includes marking charge records to indicate another patron wants the book when it is returned.

1133 ISSUE RECALL NOTICES. This includes both the preparation and mailing of recall notices as well as telephone requests to patrons for the return of material.

1134 SEARCH FOR MISSING BOOKS. This includes all of the various processed involved in attempting to physically locate a missing book and the notifying of proper people that a book is missing.

1135 MAINTAIN HOLD SHELF. This task includes all of the processes involved in maintaining the Hold Shelf including identifying and removing books which have not been picked up and modifying the appropriate library records when books are removed from the Hold Shelf.

1136 TELL PATRON BOOK AVAILABLE. This includes telephoning or mailing notices to patrons that the book which they want is now available and being held for them.

11.4 LONG TERM LOAN LIST PRODUCTION MODULE.

1140 SOLVE PROBLEMS. See Task 6100 explanation.

1141 PREPARE LISTS FROM CHARGE RECORDS. This task involves the production of periodic lists of materials charged on a long term basis to either patrons or special locations. It includes pulling, sorting, and refiling charge cards as well as the actual preparation of the lists themselves.

11.5 INTERLIBRARY LOAN CONTROL MODULE.

1150 SOLVE PROBLEMS. See Task 6100 explanation.

1151 PREPARE REQUESTS FOR PROCESSING. This includes the receipt and evaluation of requests from both library patrons and outside borrowing libraries. It includes the verification of the eligibility of the borrower.

1152 CHECK HOLDINGS. This includes locating a possible source where the needed book may be obtained for a library patron as well as checking the library's records of holdings to locate a book requested by a borrowing library.

1153 PROCESS REQUESTS. This includes any special verification which may be needed and the preparation of the necessary interlibrary loan forms. This task also includes the handling of any correspondance which is required in connection with the ILL transaction.

1154 FILE REQUESTS.

1155 CHARGE BOOK TO BORROWER. This task includes the preparation of charge records as required, the notification of library patrons that books borrowed from other libraries are available for use, etc.

1156 PROCESS BOOK FOR MAILING. This includes the preparation and routing of ILL material for mailing.

1157 OBTAIN PHOTOCOPY OF ORIGINALS. This includes all activities connected with providing photocopies in lieu of loaning the original material.

1158 CLEAR RECORDS ON RETURN. This includes transferring all interlibrary loan forms and charge records to history files for future reference as necessary. It includes any necessary followup correspondance needed to verify that material has been successfully returned.

11.6 PATRON REGISTRY MAINTENANCE MODULE

1160 SOLVE PROBLEMS. See task 6100 explanation.

1161 PROCESS LIBRARY CARD REQUESTS. This includes assisting patrons in filling out applications for library cards, the actual issuing of library cards, the collection of money for cards, the issuing of receipts, and the filing of original application for request. It includes any special instructions provided to new borrowers regarding library borrowing regulations.

1162 PREPARE MONEY FOR DEPOSIT.

1163 MAINTAIN PATRON ADDRESS LISTS. This task includes all procedures required to make available to the library up-to-date name and address lists for all classes of library patrons. It includes the preparation of such lists or the activities required to obtain up-to-date copies from other departments in the University.

11.7 OVERDUE BOOK PROCESSING MODULE.

1170 SOLVE PROBLEMS. See Task 6100 explanation.

1171 PROCESS OVERDUE CHARGE RECORDS. This includes searching charge files for overdue books and notifying the library department responsible for processing overdue charges.

1172 ISSUE OVERDUE NOTICES. This includes the actual preparation of overdue notices including the location of name and address.

1173 FILE RECORD OF OVERDUE NOTICES. This is the filing of the copies of the overdue notices or other records used for later follow-up. Also included is the preparation of "undesirable" borrower lists and the purging of such lists.

1174 TELEPHONE ABOUT OVERDUE ITEMS. This task includes the use of the phone both for informing patrons that they have overdue material which must be returned,as well as for following up on overdue notices for which there is no response.

1175 PREPARE BILLS AND SEND OUT. This task includes the calculation of overdue fines, the assignment of processing charges or book replacement costs, the preparation and filing of internal records and actually mailing the bills.

1176 INITIATE LOST BOOK REORDERING. This task includes all of the various procedures which are followed once it has been established that a book is lost. It includes the process of initiating an order for the lost book, and for informing all other concerned library departments that the book has been lost and the nature of the action which is going to be taken, such as obtaining a replacement copy.

1177 PROCESS LOST BOOKS WHICH ARE FOUND. This task includes all of the library procedures which are followed when a book previously thought to be lost turns up. Typical activities include clearing circulation records of erroneous notations, informing Cataloging Department that the book is no longer lost, etc. The cancellation of orders for replacement copies, the cancellation of bills for replacement or overdue fines and the handling of library records associated with these transactions are included, also.

SUPPORTING TASKS

1800 BUDGET DEVELOPMENT. This category of activities includes all of the work defined to be part of the fiscal subsystem (18.0) which is directly related to the ordering and circulation functions of the library. Only the time required to support order and standard loan functions should be reported. Thus, not all of the branch librarian's time spent working on a budget would be reported as support of order and standard loan alone.

1910 TIMEKEEPING. This task covers that portion of the timekeeping activities needed to support the ordering and circulating functions of the library. Time spent by operating staff in recording data for this study is to be reported here. Completing regular time cards, checking or verifying submitted time cards, calculating sick leave and vacation, preparing summaries of personnel time and any other record keeping functions associated with recording or reporting employee time is included. Negotiating leaves is included. All work defined under the timekeeping module (19.1) is included.

1920 PERSONNEL PROCESSING. This activity covers all of the work defined to be a part of personnel information module (19.2). It includes the work connected with the preparation of job descriptions, promotions and advancements, career planning, and other similar activities connected with the support of order and circulation functions throughout the library. It does not include the analysis of staff needs (1940) or the negotiations for increased staffing (1800). It does include performance reviews.

1930 DESK SCHEDULING. Includes the preparation or modification of desk schedules required to support either order or circulation functions of the library.

1940 STAFFING NEEDS PROJECTION. This includes the analysis of work load and preparation of estimated staffing need

1950 RECRUITMENT. This includes reviewing the qualifications of job candidates, the interviewing of job candidates, and other related personnel selection work required in support of order and circulation functions of the library.

1960 PERSONNEL TRAINING. This activitiy includes instructing new staff members on methods and procedures, conducting orientation presentations or tours, and planning associated with developing personnel training programs. It does not include time spent learning new procedures, participating in orientation programs, or attending classes. Such activities are treated as overhead and are reported under task 9910 (Education).

20.0 EQUIPMENT & SUPPLIES HANDLING. This activity is included to cover the inventory, ordering, and handling of all forms of supplies and equipment required to support the order and circulation functions of the library. All work defined to be a part of the equipment and supplies subsystem (20.0) including equipment repair and maintenance are covered here.

2130 WORK FLOW ANALYSIS. This covers all of the work necessary for evaluating the effectiveness of order and circulation operations, and for planning and implementing necessary changes to such operations. At many campuses,it will include a majority of the meetings called to resolve operational problems concerned with the order and circulation functions.

2200 FORMS, DOCUMENTS & MAIL HANDLING. This includes the design, preparation, and handling of forms; the preparation and maintenance of publications such as procedure manuals or official memoranda; and the initial receipt and routing of mail to the individual or library group responsible for the subsequent processing of the mail. Thus, the receipt, sorting, and opening of all correspondance and the receipt and routing of materials to the concerned library department are included. All of the work defined to be a part of the library document subsystem (22.0) which supports the order and circulation functions of the library are included.

2400 OTHER ADMINISTRATIVE FUNCTIONS. Attendance at regularly scheduled library meetings in order to represent the views of those concerned with order and circulation functions of the library, the preparation of progress reports, solving organizational problems, compiling statistics, and taking exception actions not otherwise described elsewhere are included insofar as the order and circulation functions of the library are concerned. All activities defined to be a part of the Organization and Policy Subsystem (24.0) are covered.

NON-PRODUCTION ORIENTED ACTIVITIES.

9901 VACATION. This includes all regularly scheduled, paid vacation for employees participating in the study.

9902 LEAVE WITHOUT PAY. This includes all leave without pay for whatever purpose for all persons in the study.

9903 SICK LEAVE. This includes all paid sick leave for employees participating in the study.

9904 HOLIDAY. This covers the paid holiday leave for all employees participating in the study.

9905 EXCUSED TIME. This includes all excused leave from normal duties such as leave for military, jury, voting, emergency building evacuations, etc. for which the employee receives pay which is not specifically covered in another category.

9906 REST BREAKS. This covers the time spent at coffee breaks, rest room visits and other excused rest time not charged to another category of leave.

9907 TRAVEL. This covers the time spent while on pay status to actually get to a location other than the employees regular work station in order to perform assigned work. Thus, if two days were spent to and from a conference and seven days were spent at the conference, only 2 days would be charged to travel.

9908 ENTERTAINING (GUESTS) ETC. This includes the time spent showing visitors around the library, taking guests, clients, staff, etc., to lunch for extended periods, and other similar activities which are not directly related to the normal functions of the library by library personnel participating in the study.

9909 NON-JOB ORIENTED TIME. This category covers authorized activities of employees participating in this study which are not related to the normal functions of the library. Excused time to participate in campus committee work, library staff association or librarian's association work, or other special assignments which are not directly related to the normal functions of the library.

9910 EDUCATION. This includes all forms of excused time to participate in library related training or education. It would include, for example, attendance at professional conferences, on-the-job training for a new position, class time for University courses, visiting other libraries, studying journals or other written material to increase general competence, etc.

ACTIVITIES EXCLUDED FROM THE STUDY

0000 OTHER LIBRARY OPERATIONS. This covers all other library activities which are outside the scope of the present study. If more than 10 hours are reported in a week for this category, a short explanatory note should be included on the back of the time sheet.

THE TOTAL SYSTEM

LIBRARY SYSTEMS DEVELOPMENT PROGRAM

1.0 COLLECTION-DEVELOPMENT SUBSYSTEM-(1.1) Collection Information, (1.2) Collection Planning, (1.3) Library Materials Selection, (1.4) Offerings Evaluation.

2.0 REQUEST SUBSYSTEM-(2.1) Request Handling, (2.2) Request Handling Services.

3.0 SOURCE SELECTION SUBSYSTEM-(3.1) Vendor Decision, (3.2) Vendor Performance Analysis.

4.0 BIBLIOGRAPHIC SEARCHING SUBSYSTEM-(4.1) Searching

5.0 BIBLIOGRAPHIC RECORD SUBSYSTEM-(5.1) Bibliographic Record, (5.2) Catalog Maintenance, (5.3)Bibliographic Authority Control.

*6.0 ORDER SUBSYSTEM-(6.1) Surplus Control, (6.2) Order Initiation, (6.3)Claims Processing, (6.4)Receiving, (6.5)Invoice Processing, (6.6)Vendor File Maintenance, (6.7)Want List Processing.

7.0 ACCOUNTING SYSTEM-(7.1)Book Fund Accounting, (7.2)Currency Conversion, (7.3)Administrative Accounting.

8.0 AUXILIARY SOURCE SUBSYSTEM-(8.1)Donor Registry Maintenance, (8.2)Exchange Program Control.

9.0 BOOK PREPARATION SUBSYSTEM-(9.1)Binding Control, (9.2)Book Labeling

10.0 PROCESS MONITORING SUBSYSTEM-(10.1)Cost Accounting, (10.2) In-Process Control.

*11.0 STANDARD LOAN SUBSYSTEM-(11.1)Book Charging, (11.2)Book Discharging, (11.3)Holds and Recalls Processing, (11.4) Long Term Loan List Production, (11.5)Interlibrary Loan Control, (11.6)Patron Registry Maintenance, (11.7) Overdue Book Processing.

13.0 STACK CONTROL SUBSYSTEM-(13.1)Collection Accessibility, (13.2) Collection Inventory, (13.3)Stack Maintenance.

14.0 INFORMATION RETIREVAL SUBSYSTEM-(14.1)Bibliography Preparation, (14.2)Selective Dissemination of Information.

16.0 PATRON SERVICES SUBSYSTEM-(16.1)Information Guidance Services, (16.2)Patron Services.

17.0 SERVICES QUALITY CONTROL SUBSYSTEM-(17.1)Faculty Liason, (17.2)Patron Relations, (17.3)Service Planning, (17.4) Patron Use Analysis.

18.0 FISCAL SUBSYSTEM-(18.1)Budget Development, (18.2)Fiscal Resource Utilization Analysis, (18.3)Funding Source Reporting, (18.4)Salary Savings Projections.

19.0 PERSONNEL SUBSYSTEM-(19.1)Timekeeping, (19.2)Personnel Information, (19.3)Desk Scheduling, (19.4)Staffing Needs Projection, (19.5)Recruitment Planning, (19.6)Personnel Training.

20.0 EQUIPMENT & SUPPLIES SUBSYSTEM-(20.1)Equipment Information, (20.2)Equipment Selection, (20.3)Supplies Inventory.

21.0 PHYSICAL PLANT & FACILITIES SUBSYSTEM-(21.1)Building Planning, (21.2)Space Utilization, (21.3)Work Flow Analysis, (21.4)Security Control.

22.0 LIBRARY DOCUMENT SUBSYSTEM-(22.1)Forms Control and Design, (22.2)Publications Planning and Control, (22.3)Documents Control, (22.4)Mail Processing.

24.0 ORGANIZATION & POLICY SUBSYSTEM-(24.1)Academic Plans Analysis, (24.2)Library Legislation Reporting, (24.3)Organization Analysis Procedure, (24.4)Administrative Information Control.

SANTA BARBARA, CALIFORNIA 93106

*Note that the cost study deals with these two functions only